Section Two Plan Elements

I Fundamental Goals

NEIGHBORHOODS

Recognize walkable neighborhoods and districts as essential building blocks of a more sustainable city and region.

Strong and healthy neighborhoods, because they operate at a scale where people walk and interact, are essential to successful and sustainable urbanization. Organizing development within walkable mixed-use districts and neighborhoods supports transit, economizes on infrastructure, and respects the environment.

Bring homes, businesses and daily destinations — like retail and community facilities— closer together within neighborhoods and districts.

Most homes should be within walking distance of a mixed-use village center containing retail, community services, and a small park or plaza. Studies have shown that this walkable pattern of development can reduce the number of vehicle-trips dramatically. Walkable districts and neighborhoods also have proven social and economic benefits resulting from better access to basic needs, amenities, safer and more active streets, improved health through physical activity, and greater cultural cohesion.

Distribute schools and parks throughout Volcano Heights, in accessible locations where children will not have to cross a busy street to get to them. Schools should not be isolated from but instead located in village centers or linked to the trail network and co-located with parks.

These locations create a rich learning environment for children to experience community life and nature. When schools and parks are closer to home, parents can spend more time with their children, older children can enjoy greater independence, and personal health and fitness improves. Co-locating schools and parks makes better use of limited public dollars and provides more developable land. Locating schools near village centers integrates schools into the neighborhood and fosters a sense of community.

Develop schools that are welcoming community facilities providing multiple uses for residents of all ages.

Schools should be integrated into the communities through their physical design and location, the programs offered, and policies concerning access. Recreational, civic, human service, and educational programs should be provided there to all members of the community at extended hours after school, on the weekends, and during the summer.

Promote diverse housing options throughout Volcano Heights.

A variety of housing types – at varying densities – allows residents, if they choose to do so, to move through all stages of life within the same neighborhood. Housing diversity will also promote business attraction and balanced development on the West Side.

TRANSPORTATION

Provide a choice of viable transportation options for commuting and daily needs.

Walking is a liberating travel option, especially for children and the elderly. At greater distances, transit should offer a convenient alternative to Single Occupancy Vehicles (SOV). Reducing reliance on the automobile reduces congestion and pressures to widen roads and bridges, especially at regional "pinch points" like the Rio Grande.

Support an efficient and reliable transit system.

To support frequent service with less public subsidy, transit corridors should be lined with higher densities and major retail, commercial, and employment destinations. In suburban settings, Bus Rapid Transit (BRT) presents a cost-effective alternative with travel times that compete with door-to-door car use and paves the way for potential future light rail routes. Exclusive transit (and HOV) lanes are incorporated into Paseo del Norte and Unser in order for transit to draw closer to the performance of SOV, especially important to attract middle class commuters.

Create "Great Streets" for people as well as cars, by providing street trees, landscaping, wide sidewalks and active uses.

Paseo del Norte and Unser will adopt boulevard configurations through the Town Center to help secure these desirable activities. Streets should feel safe and comfortable for pedestrians. The design of streets and the buildings that face them influences whether someone will chose to walk. Pedestrian-friendly streets have wide sidewalks, street trees and slow moving traffic. They also have pedestrian scaled buildings with frequent entries, windows, and attractive features. Parking lots and blank walls should be minimized along pedestrian routes.

Connect different uses and areas by an efficient and convenient street network.

Streets should not create barriers that separate people and neighborhoods. Instead, streets should create safe and direct connections between common destinations. Streets should also be designed to control auto speeds and be a comfortable place for neighbors to come together. Rather than concentrate traffic, street will distribute traffic through greater connectivity of roadways.

EMPLOYMENT

Support the creation of a major jobs center in Volcano Heights.

Most working West Side residents commute to work east of the Rio Grande (many in downtown Albuquerque or along Interstate 25), which explains regional traffic congestion at river crossings and on the West Side. Major job growth in Volcano Heights will provide opportunities for working closer to home and will "reverse" commutes in a direction where roads have existing capacity. Frequent and reliable transit service will be provided for these new workers.

Establish a mixed-use town center as a transit-oriented development that offers a range of retail, commercial and entertainment destinations, urban housing and employment opportunities.

While neighborhood retail can meet most daily requirements, many needs must be met within larger centers that receive the patronage of greater populations. A mixed-use Town Center will bring to Volcano Heights and the West Side opportunities for comparison-shopping, entertainment, restaurants, cultural activities, and government services. Following the West Side Strategic Plan, a well-designed central plaza will serve as a focus for community life in the Town Center and create a sense of place. Many people prefer dense urban housing in mixed-use environments, which greatly increase the likelihood of walking and transit use. Transit, amenities and housing in the Town Center will help to attract employment to the West Side.

OPEN SPACE AND TRAILS

Establish an interconnected open space network comprised of parks, arroyos, the Petroglyph National Monument, and other open spaces.

While development in Volcano Heights equals the loss of open space that many citizens have enjoyed, it is also an opportunity to purchase and conserve open space into perpetuity. An organized system of open space can help conserve the natural environment, mitigate the impacts of development, and provide exceptional recreational opportunities. Opportunities to experience nature should be plentiful, especially for children. Often, these open space features can form the boundary of neighborhoods and maintain distant views to the Volcanos and Sandia Mountains.

Drainage channels have played an important cultural role for prehistoric communities, connecting ceremonial sites on the mesa across the escarpment to Pueblo villages along the Rio Grande. They can be used today to form an interconnected east-west trail system along these original pathways.

Conserve Volcano Heights' arroyos and encourage residents' connections with nature.

The area's arroyos contain valuable habitat and scenic features that are distinctive. The arroyos contain many unique animals and plants, many used for medicinal and ceremonial purposes by Native American and Hispanic people, which could be threatened by development and a dramatic increase stormwater run-off that accompanies it. As linear open spaces, the arroyos and open space along Petroglyph National Monument also offer unique opportunities for trails.

Respect Albuquerque's patrimony of culture and history, both Hispanic and Native American, through the development of Volcano Heights.

Volcano Heights provides a unique portal to understand the rich interplay of cultures that is New Mexico. The "story" (actually stories) of the meaning of this place to Native American can be told through living and visiting in Volcano Heights, and by the way we develop this special area. As such, Volcano Heights can be another entry point for all of Albuquerque into different and important perspectives on humans' place on earth and spiritual path.

Preserve the Volcano Height natural environment through Conservation Development.

In lower density residential areas, establish a form of Albuquerque subdivision that reduces the development's impact on the natural environment and integrates resource conservation into the fabric of the community.

VIEWS AND CULTURAL RESOURCES

Conserve Volcano Heights' archeological resources and protect and emphasize views and visual connections to the Volcanos, Sandia Mountains and the Rio Grande.

The Volcanoes, Petroglyph National Monument, outcrops of basalt especially containing petroglyphs, the Sandia Mountains, and other locations are sacred places for many Native Americans which still figure into their ceremonial practices. The Native Americans have left petroglyphs, evidence of prehistoric settlement, and other artifacts with still active religious and cultural value. Spiritual contemplation often embraced views to the Volcanoes, the Sandia Mountains and the Rio Grande, views that are appreciated by all cultures. Views can be protected and enhanced through considerate site planning, by creating view corridors using streets and arroyos, and by emphasizing lower scale development along the view corridors.

Maintain scenic edges for Albuquerque, protect important views, and minimize the visual impact of development on the western horizon as seen throughout the city.

The westernmost portions of the Plan area, adjacent to the rising mass of the volcanic cones, will be conserved as open space with residential homes that are clustered or maintained at rural densities. In addition, height, color and other visual qualities will be controlled along the "front edge" of Volcano Heights – just above the escarpment and throughout lower density residential areas. The built environment and landscape along the edge of Volcano Heights and the Petroglyph National Monument will form a pleasant transition from the natural area to the developed area. As seen from within Volcano Heights, open space constitutes an important resource that demands special landscape and architectural treatments.

Encourage practices that are economically, aesthetically and environmentally sound

Electrical utility distribution lines should be placed underground. Infrastructure improvements should promote and make visible an environmental ethic for the area.

Encourage architectural and landscape treatments that are consistent with the region's traditions and climate, and help to establish a unique sense of place.

Albuquerque's design traditions spring from its arid climate, intense sun, local materials and the cultural background of its inhabitants. These considerations deserve continued attention, out of respect for the past and also out of concern for an energy- and water-efficient future.

DEVELOPMENT PHASING

Provide for the orderly expansion of infrastructure and public facilities in the area

Volcano Heights' infrastructure improvements will need to be phased in a way that recognizes technical limitations and available funding and that provide infrastructure and facilities in a timely way to meet the needs of residents and local employees. Elementary school boundary areas are used as the organizing principle for the timing and phasing of growth.

II Transportation

1. Intent

Transportation facilities have an enormous influence on the character of future development and on lifestyle choices. They influence whether we can walk or have to drive, whether bicycling and hiking are easy options for recreation, and whether transit can get us to jobs or cultural events quickly. Street design makes it possible for homes to face the street creating an outdoor "living room" for the neighborhood rather than a wall of garages. It is even been shown that street design influences how well we know our neighbors.

Streets and Walking. The standards of this plan are intended to create streets that are more pedestrian-friendly, while also meeting the demands of motorists and emergency vehicles. Walkable neighborhoods are the basic building block for more livable—and environmentally sustainable—cities. Design plays a vital role in their creation. An arrangement of complementary land uses with pedestrian compatible design paired with inviting streets influence the extent to which workers and residents walk to local destinations and use transit. Pedestrian-friendly streets are a foundation to transit-oriented development and create an alternative to driving for many daily needs.

In deciding to walk or bike instead of drive, pedestrian and biking environments must feel safe and comfortable. Fast, unmitigated traffic presents a major deterrent. The incidence of major pedestrian and bicycle injuries is significantly reduced when vehicle speeds approach 25 miles per hour. The use of modest travel lane widths and traffic calming devices slows traffic, while adding little to motorists' real travel times.

Pedestrians feel more comfortable when on-street parking and street trees are placed between sidewalks, and when street crossing distances are reduced. Street trees reduce temperatures by as much as ten degrees—an important advantage on hot days—and on-street parking is critical to attracting street-facing shops.

Pedestrian comfort and safety are influenced by the relationship between abutting uses and streets. Streets lined by rear yard fences, garage doors or parking lots are unwelcoming, and have been shown to attract more crime than streets lined by building entries, creating semi-private space through porches and stoops, and windows. Traffic must be kept to modest volumes, however, to encourage street-facing buildings in most settings. A highly interconnected street network plays a critical role in keeping traffic volumes to appropriate levels. Street connectivity also reduces pedestrian travel distances to local destinations, and integrates the many functions and activities of a city center.

Great Streets and Boulevards. The roadways through Volcano Heights should be pleasant and memorable places, whether experienced by car or on foot. The basic recipe

for great streets is simple: provide sidewalks sized to anticipated activity; plant closely-spaced street trees; and keep cartways to minimum dimensions. In urban areas, frame streets with handsome building fronts placed close to the street, and where a rural setting is desired, avoid curbs and group buildings together to retain "long views" across open space.

Transit. Transit plays a vital role in reducing regional traffic congestion, but to be widely used it must be fast, frequent, and reliable. Volcano Heights' emphasis on walkability and urban development will make more frequent transit service viable. The Bus Rapid Transit (BRT) system proposed for the area uses dedicated bus lanes and emerging technologies to make travel times competitive with the car. As proposed, BRT would efficiently move area residents and workers to and from jobs and activities in central Albuquerque and in the I-25 corridor.

Trails. Bicycling and hiking will be encouraged through a network of open space trails and supportive street features, like bike lanes and landscaping. These facilities will make biking and hiking safer and more enjoyable, whether it is for commuting, errands, or leisure. Trail locations and design will help avoid human activity on ecologically- and archeologically-sensitive lands.

2. STREET NETWORK

Major Street Network. The alignment of major streets within the Volcano Heights Area Plan is described on the *Road Network* map (Exhibit 17) This map shows street types forming an interconnected network that can distribute traffic among multiple routes, and thereby reduce reliance (and excessive volumes) on fewer routes. The network will enhance access in the Plan Area by providing routes that are more direct, and by reducing traffic volumes on collector streets and arterials, so that fewer travel lanes and a more intimate, pedestrian-supportive environment can be created. (Refer to Kimley-Horn's *Volcano Heights Concept Plan – Traffic Operations Assessment and Boulevard Design Recommendations* report). Amendments are needed to the Middle Rio Grande Council of Governments *Long Range Major Street Plan* and to the design standards for Unser Boulevard contained in Bill No. F/S R-455 (Enactment 169-1989).

While the integrity of the street network should be maintained, minor adjustments to the street alignments depicted may be made to avoid significant rock outcroppings, or archeological or biotic resources, or to respond to unanticipated engineering factors.

Street Connectivity. The Road Network map shows the recommended alignment of limited access roadways, arterial and collector streets. The alignment of local streets has not been determined, as they depend on the requirements of future, still-to-be defined projects.

Diagram 1 *Street Network* contrasts an interconnected network of streets using one-quarter mile intersections, with a conventional pattern of street design in which there are fewer entrances from local to major streets. In the Town Center,

Village Center, Neighborhood Mixed Use and Residential zones, adequate connectivity

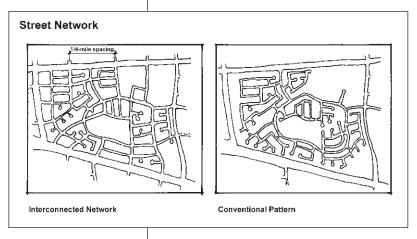
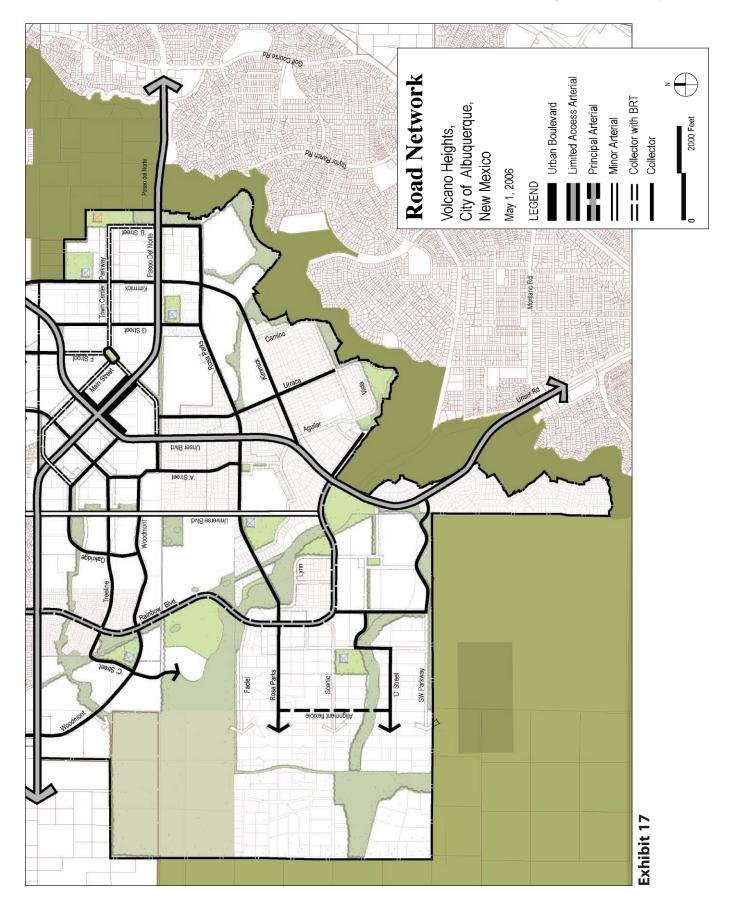


Diagram 1



among streets must be assured. Adequate connectivity is critical for providing direct routes to local destinations, and for disbursing traffic such that all streets can be pedestrian-friendly. To ensure adequate connectivity, continuous street connections shall be provided at least every 800 feet, except near Open Space, Executive Residential and Rural Estate areas. Continuous street connections may be accompanied by offset intersections at special locations and by traffic calming features to discourage cut-through traffic.

Block Size. Smaller city "blocks" (bound by streets or publicly-accessible open space) ensure that streets and pedestrian routes are more direct and intimate in scale. Blocks shall be

fully bound by streets, or bound on one side by a publicly accessible path or open space. In Village Center, Town Center, Main Street, Urban Residential and Suburban

Residential zones, blocks shall not exceed: 3 acres for residential uses (including residential over storefronts), and 6 acres for retail and office uses. Maximum block sizes are shown in Diagram 2. Block size requirements do not apply to Rural Residential, Executive Residential, or public uses.

3. STREET DESIGN

Contextual Street Types. Street design shall correspond with each street's unique function and context. This *contextual* approach puts in place conditions that support abutting land uses and walking for many trips by: protecting pedestrians, minimizing pedestrian crossing distances, and reducing vehicular speeds, and protecting ecologically- and archeologically-sensitive features—while also accommodating reasonable vehicular travel times. The Area Plan depicts the alignment of arterial streets and most collector streets, as described on the Road Network. Local street alignments are not the subject of the Area Plan. Where emergency access is required, the clear uninterrupted dimension of any cartway shall not be less than 14'.

Sidewalks and Street Trees. Where average densities exceed 2 units per gross acre, sidewalks should accompany all streets. Street trees should be placed between the curb and where most pedestrians walk: within grated tree-wells along shopping streets and where drop-offs occur frequently; and within land-scaped strips in other areas. Where average densities are less than 2 units per acre, trails and gravel shoulders may be used in lieu of streetside sidewalks. (See Diagram 3).

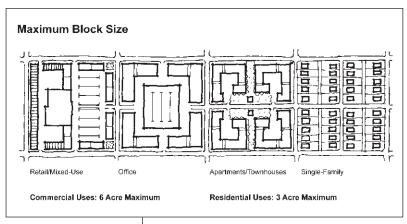


Diagram 2

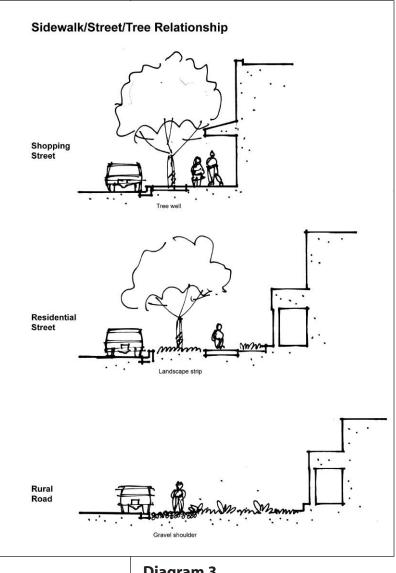
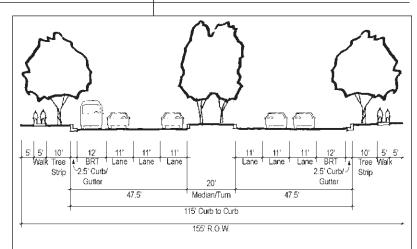


Diagram 3

Arterials. Arterials accommodate the highest traffic volumes in the Area with significant volumes of through traffic. Arterials have 11-foot travel lanes, and include: Paseo del Norte (PdN), Unser, Rainbow, and Universe. PdN and Unser are designated Limited Access Roadways on the regional Long Range Roadway System Plan. For each arterial, the number of travel lanes (non-BRT) remains constant, except for a short segment of Unser just south of PdN to improve the performance of the Unser/PdN intersection. BRT lanes are also designated for PdN and Unser in places where the BRT is not serving the center of the Town Center and Universe Village. In addition to these variables, some arterial cross-sections are designed expressly to provide pedestrian activity and parking where street-facing storefronts are desired. Bicycle lanes accompany some Arterials.

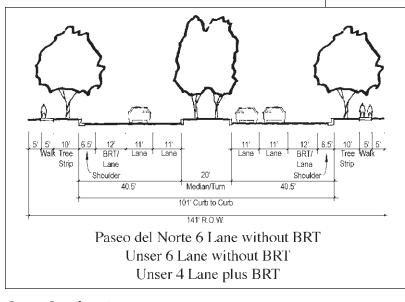
Limited Access Roadways - Paseo del Norte and Unser (Exhibit 18 *The Limited Access Arterials Key Map*) shows where the various cross-sections apply to the road system. Three segments for Unser are shown: the portion through the escarpment, through the Town Center, and elsewhere. Some elements of Unser are uniform throughout.

Cross Sections for Limited Access Roadways



Paseo del Norte 6 Lane plus BRT

Cross Section 1



Cross Section 2